

# **Econ 133 – Global Inequality and Growth**

## **Optimal capital taxation**

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## What we've learned so far:

- There has been dramatic changes in top tax rates over time
- Two key principles of optimal labor income taxation:
  - Don't tax what is elastic
  - The more inequality, the higher the optimal labor income tax rate at the top

## What we're going to learn in this lecture:

- Why tax capital?
- Theories of optimal capital taxation
- How high and progressive should capital taxes be?

# 1 Why tax capital?

- Capital is back: rising wealth/income ratios, rising capital shares
- Distribution of capital income much more unequal than labor
- Capital income inequality is due to differences in savings behavior but also inheritances received

⇒ **Equity suggests it should be taxed more than labor**

But capital accumulation correlates with growth

- Causality link is not obvious
- Capital accumulation might be sensitive to the net-of-tax return (but little evidence on elasticity of capital supply)

⇒ **Efficiency cost of capital taxation might be high**

In practice, it is difficult to tax capital with capital mobility and little international coordination

- Easy to artificially book corporate profits in low-tax countries (see next lecture)
- Easy to evade personal taxes if no coordination

→ Today we will assume closed economy (or perfect international coordination). Will be relaxed in next lecture

## 2 Theories of optimal capital taxation

- If inequality entirely came from labor income, it would be useless to tax K
  - But in practice inheritance plays a big role
  - And it is not easy to separate L from K income flows
- These are the two key reasons why capital should be taxed

## 2.1 Fuzzy frontier between capital and labor

Main situations where the K/L frontier is fuzzy:

- Business owners can decide how much they get paid in wages vs. dividends
- Corporate executives
- Can be hard to decompose income flows into pure L and K components (ex: bargaining power influenced by equity wealth)



Vast amount of empirical evidence on how differential tax treatment can induce shifting:

- US: C-corporations vs S-corporations: shift from corporate income toward individual business income (Gordon and Slemrod 2000)
- Carried interest in the US for hedge fund and private equity fund managers
- Finnish dual income tax system: taxes separately K income at preferred rates since 1993.

The higher the shifting elasticity, the closer the tax rates on labor and capital income should be

- Extreme case where government cannot distinguish at all between labor and capital income
- $\Rightarrow$  Govt observes only  $wl + rK \Rightarrow$  Only option is to have identical marginal tax rates on labor and capital
- In practice, this seems to be a very important consideration when designing income tax systems, especially for top incomes

## 2.2 Meritocratic arguments

- Most normative theories of distributive justice put a strong emphasis on individual merit → tax bequests
- But individuals value the possibility of leaving a bequest to their children → don't tax bequests

→ Interesting trade-off.

## Piketty-Saez (2013) simplified optimal inheritance tax model:

- Meritocratic Rawlsian criterion: maximize welfare of those receiving no inheritances
- **Optimal inheritance tax rate:**

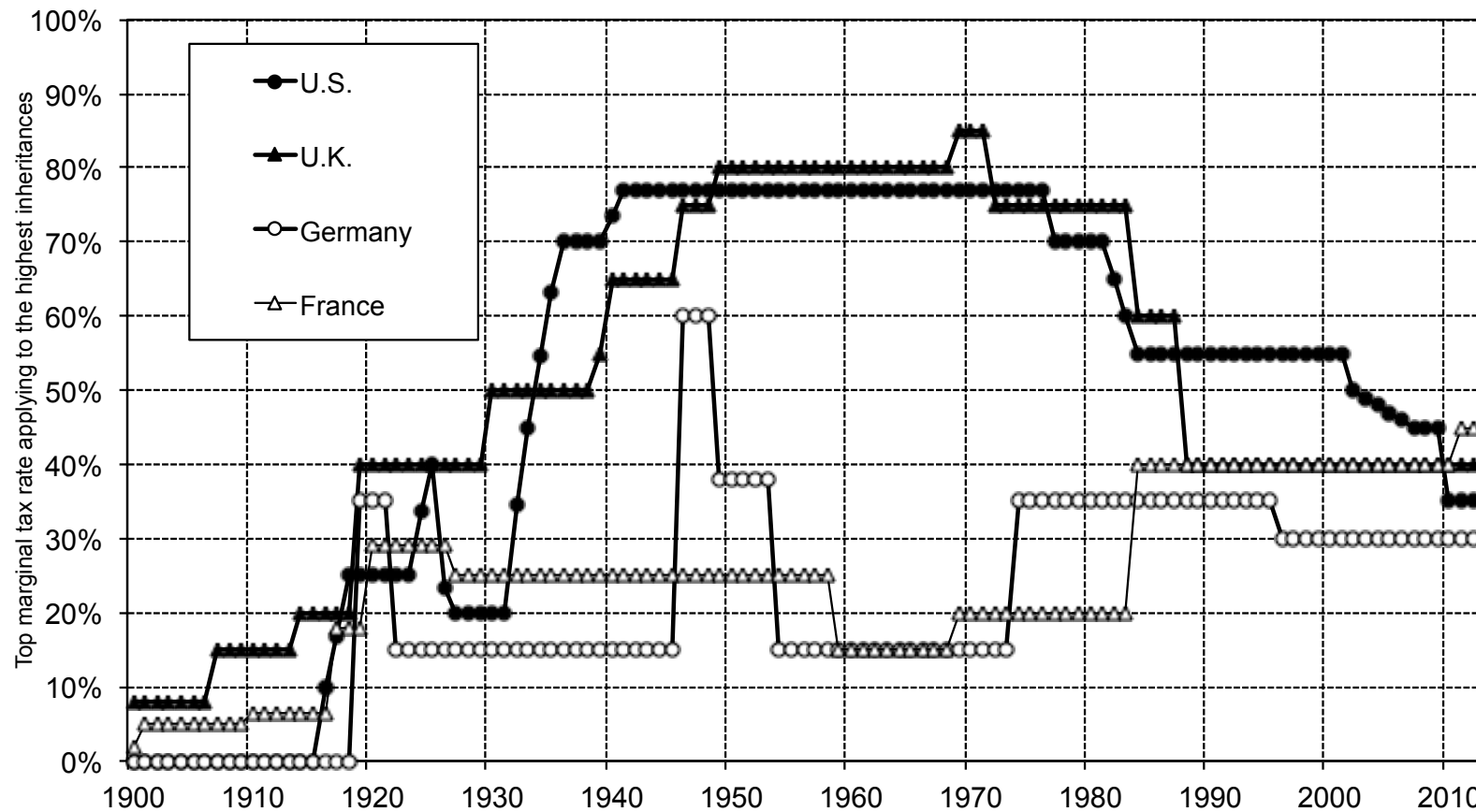
$$\tau_B = \frac{1 - \bar{b}}{1 + e_B}$$

with  $e_B = \frac{1 - \tau_B}{b} \frac{db}{d(1 - \tau_B)}$  elasticity of aggregate bequests and  $\bar{b} =$  relative bequest left by zero-bequest receivers

## Key insights:

- Optimal  $\tau_B < 1/(1 + e_B)$  revenue maximizing rate because zero-receivers care about bequests they leave
- $\tau_B = 0$  if  $\bar{b} = 1$  (i.e, zero-receivers leave as much bequest as average)
- If bequests are quantitatively important, highly concentrated, and low wealth mobility then  $\bar{b} \ll 1 \rightarrow$  high  $\tau_B$

Top inheritance tax rates, 1900-2013



The top marginal tax rate of the inheritance tax (applying to the highest inheritances) in the U.S. dropped from 70% in 1980 to 35% in 2013. Sources and series: see [piketty.pse.ens.fr/capital21c](http://piketty.pse.ens.fr/capital21c).

## 2.3 The proper way to tax billionaire: a wealth tax?

Income flow can be difficult to observe for top wealth holders:

- Capital income retained in holding companies, trusts, etc., can create large gap between economic and taxable income
- In principle,  $Y_{ti}$  could be estimated as  $\Delta W_{ti} + C_{ti}$
- But  $C_{ti}$  often hard to define at the top: private jet purchase?

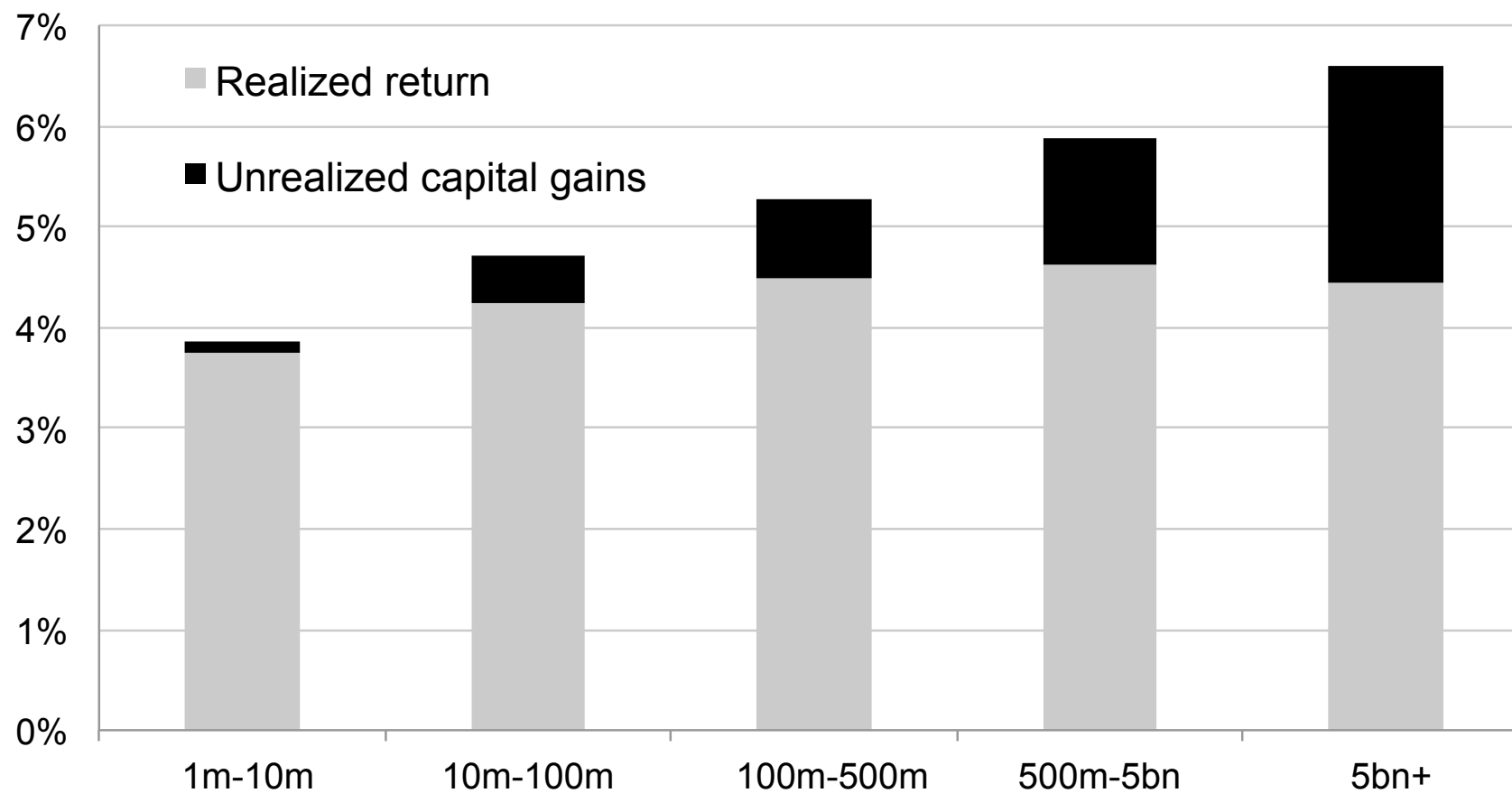
- On the contrary  $W_{ti}$  is well defined

The lower the elasticity of the rate of return  $\tilde{R}(e_{ti})$  with respect to the tax rate, the higher the optimal wealth tax rate on billionaires

- Some evidence suggests  $\tilde{R}(e_{ti})$  may largely be determined by initial wealth
- Above a certain threshold, high fortunes tend to grow fast, whatever their source



**Figure C4: Return on foundation wealth, 1990-2010 average**  
**Returns including realized & unrealized gains**



### 3 Summary

- Two main reasons for taxing capital:
  1. Meritocratic reasons
  2. Imperfect observability of labor vs. capital flows
- A wealth tax might be the right way to tax billionaires

## References

Piketty, Thomas and Emmanuel Saez “A theory of optimal inheritance taxation”, *Econometrica*, 2013 (web)

Diamond, Peter and Emmanuel Saez “The case for a progressive tax: from basic research to policy recommendations”, *Journal of Economic Perspectives* 2011 (web)